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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,853	04/02/2001	Hyun-doo Shin	Q59547	7185
7590 01/11/2006 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037-3213			EXAMINER LE, BRIAN Q	
			ART UNIT 2621	PAPER NUMBER

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/822,853

Applicant(s)

SHIN ET AL.

Examiner

Brian Q. Le

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 14-17, 19, and 21-24 is/are allowed.
- 6) ☒ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 18, 20 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/08/2005 has been entered.

**Response to Amendment and Arguments**

2. The claim objections are withdrawn.
3. Applicant's arguments with regard to claims 14-17, 19, and 21-24 have been fully considered, but are not considered persuasive because of the following reasons:

Regarding independent claims 14, 19 and 21, the Applicant argues (Remarks, page 9) that Chang's Reference does not disclose the computation of perceptual dissimilarity automatically and without human intervention. The Examiner respectfully disagrees. Chang clearly discloses a system in utilizing metadata to automatically compute the perceptual dissimilarity (page 927, column 2, last paragraph and page 930, column 2, second paragraph, "the templates, distribution ... the metadata will support efficient on-line retrieval of image queries"). Further, it is clear that Chang discloses a computer system in computing the perceptual similarity/dissimilarity, which is automation computation. In addition, after reconsidering the specification, the amended limitations "automatically determining a statistically dissimilarity between the images" and "automatically determining a ... of the perceptual dissimilarity" are not found.

Thus, the rejections of all of the claims are maintained.

***Claim Objections***

4. Claims 14, 19 and 21 are objected to because these claims are very difficult to understand due to the use of confusing language. Appropriate correction is required. The prior art rejection based on the Examiner's best understanding. Regarding independent claims 14, 19 and 21, the amended limitation "automatically determining a textural dissimilarity without input from a user ... of the perceptual dissimilarity" is not understood. The Applicant is advised to clarify the input aspect further. Even with the automation technology, input such as parameters, settings, images are still needed to enter in the system by user in order for a system to automate efficiently.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 14-17, 19, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang, "Data Resource Selection in Distributed Visual Information Systems", I.E.E.E. Knowledge and Data Engineering, Volume. 10, pages: 926-946 November 1998.

Regarding claim 14, Chang teaches a method of measuring the textural similarity of images, the method comprising:

Automatically (page 927, column 2, last paragraph and page 930, column 2, second paragraph, "the templates, distribution ... the metadata will support efficient on-line retrieval of

Art Unit: 2623

image queries”) determining a statistical dissimilarity ( $d(i,j)$ ) between the images ( $i,j$ ) (similarity measure/computation between input and template images) (Page 928, column 2, last two paragraphs); and automatically determining a textural dissimilarity ( $D(i,j)$ ) using said statistical dissimilarity ( $d(i,j)$ ) (Page 932), characterized by determining a perceptual dissimilarity (visual dissimilarity) between the images (Page 926, column 2, second paragraph) and the influence of said statistical dissimilarity ( $d(i,j)$ ), on the textural dissimilarity ( $D(i,j)$ ), being dependent on a function (based on factor) of the perceptual dissimilarity (Page 938, first column, first paragraph) where  $d$  is a function whose value is dependant on a range and magnitude of the perceptual dissimilarity (mean and variances of similarity distribution) (page 921, column 1, first paragraph).

Referring to claim 15, Chang teaches a method wherein determining the perceptual dissimilarity (Page 926, column 2, second paragraph) comprises:

Determining quantitative measurements of the textural regularity of the respective images (Page 932, second column); and determining the difference between said quantitative measurements (Fig. 3 and page 929, first column).

For claim 16, Chang also teaches a method wherein the textural dissimilarity is a value proportional to the statistical dissimilarity when the perceptual dissimilarity is not larger than a predetermined threshold (Page 929, second column).

Regarding claim 17, Chang discloses a method wherein the degree of influence of the statistical dissimilarity of the textural dissimilarity ( $D(i,j)$ ) is determined in dependence on the magnitude of the perceptual dissimilarity when the perceptual dissimilarity is greater than a

Art Unit: 2623

predetermined threshold (similarity between a range of threshold is greater than a predetermined threshold) (page 928, second column, third column).

For claim 19, please refer back to claim 14 for the teachings and explanations. In addition, Chang teaches a computer-readable recording medium storing a computer program for the aforementioned limitation (server, database and software) (abstract).

For claim 21, please refer back to claim 14 and claim 19 for further teachings and explanations.

For claim 22, please refer back to claim 15 for the teachings and the explanations.

For claim 23, please refer back to claim 16.

For claim 24, please refer back to claim 17.

***Allowable Subject Matter***

7. Claims 18, 20, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2623


**Contact Information**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q. Le whose telephone number is 571-272-7424. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on 571-272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BL  
January 4, 2006



**SAMIR AHMED**  
**PRIMARY EXAMINER**